

1. A method of creating a digital certificate revocation list (CRL), comprising:
 - determining a latest owned CRL stored by a CRL recipient;
 - creating a delta CRL comprising a list of digital certificates with a status of satisfying at least one inactive criterion, wherein said status has changed since the latest owned CRL; and
 - sending the delta CRL to the CRL recipient.
2. The method according to claim 1, further comprising receiving a request for a CRL, the request including an indication of the latest owned CRL, and wherein the latest owned CRL is determined by examining the request.
3. The method according to claim 1, further comprising formatting the delta CRL as an ASN.1 format delta CRL.
4. The method according to claim 1, wherein the creating comprises comparing entries in the latest owned CRL with a current CRL.
5. The method according to claim 1, wherein the creating comprises querying a database for entries spanning the latest owned CRL and a current CRL.
6. The method according to claim 1, wherein the creating comprises merging data from a plurality of delta CRLs spanning from the latest owned CRL to a current CRL.
7. The method according to claim 1, further comprising applying a digital signature to the CRL.
8. An electronic storage medium storing instructions which when executed on a programmed processor carry out the method of creating a digital certificate revocation list according to claim 1.

- 1 9. A method of creating a digital certificate revocation list (CRL), comprising:
2 receiving a request for a CRL, the request including an indication of a latest
3 owned CRL;
4 creating a delta CRL comprising a list of digital certificates satisfying at least
5 one inactive criterion since the latest owned CRL; and
6 sending the delta CRL as a reply to the request.
7
8 10. The method according to claim 9, further comprising formatting the delta
9 CRL as an ASN.1 format delta CRL.
10
11 11. The method according to claim 9, wherein the creating comprises comparing
12 entries in the latest owned CRL with a current CRL.
13
14 12. The method according to claim 9, wherein the creating comprises querying
15 a database for entries spanning the latest owned CRL and a current CRL.
16
17 13. The method according to claim 9, wherein the creating comprises merging
18 data from a plurality of delta CRLs spanning from the latest owned CRL to a current
19 CRL.
20
21 14. The method according to claim 9, further comprising applying a digital
22 signature to the CRL.
23
24 15. An electronic storage medium storing instructions which when executed on
25 a programmed processor carry out the method of creating a digital certificate
26 revocation list according to claim 9.
27
28 16. The method according to claim 9, wherein the sending comprises
29 transmitting the CRL as a reply over an electronic communication medium.

1 17. A data structure, stored on a computer readable storage medium or
2 transported over an electronic communication medium, for a digital certificate
3 revocation list (CRL), comprising:

4 a list of digital certificates representing changes to a CRL that have occurred
5 since generation of at least two additional CRLs; and

6 a CRL identifier; and

7 wherein the CRL is formatted as a delta CRL.

8
9 18. The data structure according to claim 17, wherein the CRL identifier
10 comprises a sequentially assigned number.